17.(NEW) The hydrothermal electrolytic apparatus of claim 16 having an inlet at the bottom for introducing influent and an outlet at the top for discharging effluent.

18.(NEW) The hydrothermal electrolytic apparatus of claim 16 wherein said reaction cell comprises two or more tubular reaction cells each having a metal inner wall serving as a cathode and an anode is provided in each of said reaction cells.

19.(NEW) The hydrothermal electrolytic apparatus of claim 16 wherein said pair of electrodes comprises:

a first electrode having two or more concentrically cylindrical first side walls and a first connecting member for connecting said first side walls together, and

a second electrode having two or more concentrically cylindrical second side walls and a second connecting member for connecting said second side walls together,

wherein said first side walls of said first electrode and said second side walls of said second electrode are alternately arranged to form a channel for influent between said first side walls and said second side walls.

20.(NEW) The hydrothermal electrolytic apparatus of claim 16 further comprising:

an influent line having a high-pressure pump for supplying influent to said reaction cell,

an oxidizer line for supplying an oxidizer to said reaction cell, and

an effluent line for discharging effluent from said reaction cell.

21.(NEW) A process for clarifying influent, comprising the steps of:

introducing an influent containing water and reducible substances into a reaction cell of the hydrothermal electrolytic apparatus of claim 16,

supplying a direct current into said reaction cell at a temperature of 100°C or more but the critical temperature of said influent or less and at a pressure that allows water in said influent to be kept in the liquid phase, and

discharging the effluent from said reaction cell.

22.(NEW) A process for clarifying influent, comprising the steps of:

introducing an influent containing water and reducible substances into a reaction cell of the hydrothermal electrolytic apparatus of claim 17,

supplying a direct current into said reaction cell at a temperature of 100°C or more but the critical temperature of said influent or less and at a pressure that allows water in said influent to be kept in the liquid phase, and

discharging the effluent from said reaction cell.

23.(NEW) A process for clarifying influent, comprising the steps of:

introducing an influent containing water and reducible substances into a reaction cell of the hydrothermal electrolytic apparatus of claim 18,

supplying a direct current into said reaction cell at a temperature of 100°C or more but the critical temperature of said influent or less and at a pressure that allows water in said influent to be kept in the liquid phase, and

discharging the effluent from said reaction cell.

24.(NEW) A process for clarifying influent, comprising the steps of:

introducing an influent containing water and reducible substances into a reaction cell of the hydrothermal electrolytic apparatus of claim 19,

supplying a direct current into said reaction cell at a temperature of 100°C or more but the critical temperature of said influent or less and at a pressure that allows water in said influent to be kept in the liquid phase, and

discharging the effluent from said reaction cell.

25.(NEW) A process for clarifying influent, comprising the steps of:

introducing an influent containing water and reducible substances into a reaction cell of the hydrothermal electrolytic apparatus of claim 20,

supplying a direct current into said reaction cell at a temperature of 100°C or more but the critical temperature of said influent or less and at a pressure that allows water in said influent to be kept in the liquid phase, and

discharging the effluent from said reaction cell.

26.(NEW) A hydrothermal electrolytic apparatus comprising:

a feeder for supplying an influent containing water and reducible substances with conductive particles, and

a reaction cell for subjecting said influent supplied with conductive particles to electrolysis at a temperature of 100°C or more but the critical temperature of said influent or less and at a pressure that allows water in said influent to be kept in the liquid phase.

27.(NEW) A hydrothermal electrolytic apparatus comprising:

a reaction cell for supplying a direct current to an influent containing water, reducible substances and conductive particles at a temperature of 100°C or more but the critical temperature of said influent or less and at a pressure that allows water in said influent to be kept in the liquid phase, and

a separator for separating the conductive particles from the effluent.

28.(NEW) The hydrothermal electrolytic apparatus of claim 27 wherein said separator comprises a liquid cyclone.

29.(NEW) The hydrothermal electrolytic apparatus of claim 27 wherein said separator comprises a filter device.

30.(NEW) The hydrothermal electrolytic apparatus of claim 27 wherein said reaction cell comprises two or more tubular reaction cells each having a metal inner wall serving as a cathode and an anode is provided in each of said reaction cells.

31.(NEW) The hydrothermal electrolytic apparatus of claim 27 wherein said reaction cell has a pair of electrodes comprising:

a first electrode having two or more concentrically cylindrical first side walls and a first connecting member for connecting said first side walls together, and

a second electrode having two or more concentrically cylindrical second side walls and a second connecting member for connecting said second side walls together,

wherein said first side walls of said first electrode and said second side walls of said second electrode are alternately arranged to form a channel for influent between said first side walls and said second side walls.

32.(NEW) A hydrothermal electrolytic process comprising subjecting an influent containing water, reducible substances and conductive particles to electrolysis at a temperature of 100°C or more but the critical temperature of said influent or less and at a pressure that allows water in said influent to be kept in the liquid phase.

33.(NEW) The hydrothermal electrolytic process of claim 32 wherein said conductive particles are suspended in said influent and said influent further contains a strong acid ion.

34.(NEW) The hydrothermal electrolytic process of claim 32 wherein said electrolysis step is followed by the step of separating said conductive particles and the step of adding the separated conductive particles to said influent again.